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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,454	12/07/2000	Terry Si-Fong Cheng	19-14-17	6550
30594	7590	05/19/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			TSEGAYE, SABA	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/732,454

Applicant(s)

CHENG ET AL.

Examiner

Saba Tsegaye

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: on page 7, line 28- page 8, line 7, it is not clear whether the number of frames are 50, 60 or 70.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13:

Line 6, the phrase "the aggregate data" lacks antecedence basis.

Line 8, the phrase "the normalized aggregate rate" lacks antecedence basis

Line 8, it is not clear what is referred by "the normalized aggregate rate".

In claim 11;

Line 2, the phrase "the window" lacks antecedence basis.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Salonaho et al. (US 6,594,495).

Salonaho discloses, in Fig. 2, a method of determining the reverse link data rate limit for a mobile station of a high data rate system comprising the steps of:

adding together the rates at which data is being transmitted from each mobile in a common sector to obtain an aggregate rate (column 5, line 66-column 6, line 3),  
obtaining a moving average of the aggregate rate (column 6, lines 3-7), and  
normalizing the aggregate rate to generate an estimate of the maximum aggregate reverse link rate (column 6, lines 3-31).

Regarding claim 2, Salonaho discloses the method wherein the sum obtained by adding the rates at which data is being transmitted is for each mobile during a common frame (column 5, lines 8-12).

Regarding claim 3, Salonaho discloses the method further comprising the step of comparing the estimate of the maximum aggregate reverse link rate with a set of threshold values to obtain a maximum rate limit for the mobile station (column 6, lines 3-31).

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Regarding claim 4, Salonaho discloses the method further comprising the step of setting the rate at which data is transmitted from a mobile to be equal to or less than the obtained maximum rate limit (column 6, lines 3-31).

Regarding claim 5, Salonaho discloses the method further comprising the step offsetting the rate at which data is transmitted from a mobile to be equal to or less than the obtained maximum rate limit (column 5, lines 8-20; column 6, lines 3-59).

Regarding claim 6, Salonaho discloses the method wherein the normalizing step comprises multiplying the aggregate by the ratio of the aggregate data rate of the active mobiles divided by the maximum data rate limit of the reverse link (column 6, lines 3-59).

Regarding claim 7, Salonaho discloses the method wherein the step of obtaining a moving average of the aggregate rate comprises the step of adding the aggregate rate for a single frame to an average of the aggregate rate of preceding frames (column 6, lines 3-59).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salonaho et al. in view of Alcatel (EP 1100283).

Salonaho discloses all the claim limitations as stated above except for a window of a fixed number of frames.

Alcatel teaches a moving average cell load calculated over a sliding window. Further, Alcatel teaches that modifying the maximum allowed cell load or maximum equivalent parameter value for new call admission, by increase or decrease, when the number is different from a given admissible outage threshold value.

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a system that uses a window of a fixed number of frames, such as that suggested by Alcatel, to the system of Salonaho in order to make the scheme more robust to abrupt cell load variations due to the arrival of new calls (column 5, lines 25-39).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Longoni (US 2002/0052206) discloses a method and system for performing cell load control in a mobile radio network.

Salonaho et al. (US 6,173,187) discloses a method of setting load goal and radio system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (703) 308-4754. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST  
May 15, 2004



**JOHN PEZZLO**  
**PRIMARY EXAMINER**